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(54) **Long shelf-life high moisture content cereal products**

(57) A long shelf-life, high moisture content cereal product is provided that can contain an acid-stable milk protein and at least about 45% total water content by total weight of the cereal product.

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EUROPEAN SEARCH REPORT

 Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2004/005400 A1 (ZUKERMAN HAROLD W [US] ET AL) 8 January 2004 (2004-01-08) * paragraphs [0007] - [0023] * * example 1 *	1-17	INV. A23L1/164 A23L1/00 A21D8/04 A21D6/00
X	US 6 103 283 A (ZUKERMAN HAROLD W [US] ET AL) 15 August 2000 (2000-08-15) * column 3, line 16 - column 6, line 22 * * examples *	1-17	A23L1/0526 A23L1/0524 A23L1/03
X	WO 2004/037191 A2 (UNIV VERMONT [US]; GUO MINGRUO [US]) 6 May 2004 (2004-05-06) * page 3, line 28 - page 16, line 10 * * example 2 *	1-17	
X	US 4 971 810 A (HOYDA DAVID L [US] ET AL) 20 November 1990 (1990-11-20) * examples * * column 3, line 29 - column 7, line 13 *	1-17	
X	US 2 395 060 A (SIDNEY MUSHER) 19 February 1946 (1946-02-19) * page 1, line 1 - page 3, line 23 *	1-17	TECHNICAL FIELDS SEARCHED (IPC)
X	WO 00/70972 A1 (PROBI AB [SE]; BERGGREN ANNA [SE]; JOHANSSON MARIE LOUISE [SE]; LARSSO) 30 November 2000 (2000-11-30) * example 1 *	1-13	A23L A21D A23B A23C
X	US 2004/028667 A1 (NORMAN DANIEL [SE] ET AL) 12 February 2004 (2004-02-12) * paragraphs [0045] - [0052] *	1-13	
X	WO 00/30457 A1 (KELLOG CO [US]) 2 June 2000 (2000-06-02) * page 1, lines 1-9 * * page 5, line 5 - page 9, line 24 * * claims; examples *	18-21	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 December 2013	Examiner Hartlieb, Ariane
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 190 708 B1 (TRIANTAFYLLOU ANGELIKA OSTE [SE]) 20 February 2001 (2001-02-20) * column 2, line 27 - column 8, line 27 * * claims; examples *	18-21	
X	US 5 585 131 A (JENKINS RONALD K [US] ET AL) 17 December 1996 (1996-12-17) * column 2, line 1 - column 4, line 30 * * examples *	18-21	
X	US 2004/033291 A1 (BURGERMEISTER RENE [CH] ET AL) 19 February 2004 (2004-02-19) * paragraphs [0001], [0034] - [0042] * * claims; examples *	22-24	
X	US 6 268 008 B1 (CELORIO GARRIDO SERGIO ALEJAND [MX]) 31 July 2001 (2001-07-31) * column 2, line 21 - column 3, line 25 * * claims; examples *	22-24	
X	WO 00/65930 A1 (BIOFERME OY [FI]; LOEV JEFF [FI]; SCHARLIN MERJA [FI]; SALMINEN SEppo) 9 November 2000 (2000-11-09) * page 3, line 18 - page 6, line 14 *	22-24	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 December 2013	Examiner Hartlieb, Ariane
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-17

Long shelf-life, high moisture content cereal product

2. claims: 18-21

Hydrolyzed oat flour and process for enzymatically treating
oat flour

3. claims: 22-24

Use of an acid for prolonging the self life of a cereal
product

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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16-12-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004005400 A1	08-01-2004	CA 2409786 A1	08-01-2004
		US 2004005400 A1	08-01-2004
		US 2005249859 A1	10-11-2005

US 6103283 A	15-08-2000	CA 2287027 A1	14-06-2000
		US 6103283 A	15-08-2000

WO 2004037191 A2	06-05-2004	AU 2003285937 A1	13-05-2004
		CA 2506932 A1	06-05-2004
		WO 2004037191 A2	06-05-2004

US 4971810 A	20-11-1990	NONE	

US 2395060 A	19-02-1946	NONE	

WO 0070972 A1	30-11-2000	AT 311122 T	15-12-2005
		AU 772809 B2	06-05-2004
		AU 4969100 A	12-12-2000
		BR 0011277 A	18-11-2003
		CA 2374044 A1	30-11-2000
		CN 1351473 A	29-05-2002
		DE 60024438 D1	05-01-2006
		DE 60024438 T2	29-06-2006
		DK 1178740 T3	27-12-2005
		EP 1178740 A1	13-02-2002
		ES 2249269 T3	01-04-2006
		JP 4908680 B2	04-04-2012
		JP 2003500036 A	07-01-2003
		MX PA01011967 A	04-09-2003
		NO 20015405 A	05-11-2001
		NZ 515799 A	30-05-2003
		PL 354359 A1	12-01-2004
		SE 9901856 A	24-11-2000
		US 7311932 B1	25-12-2007
		WO 0070972 A1	30-11-2000

US 2004028667 A1	12-02-2004	AT 417862 T	15-01-2009
		AU 8280601 A	13-03-2002
		EP 1322669 A1	02-07-2003
		NZ 524445 A	28-05-2004
		US 2004028667 A1	12-02-2004
		WO 0218442 A1	07-03-2002

WO 0030457 A1	02-06-2000	AU 1736200 A	13-06-2000
		WO 0030457 A1	02-06-2000

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 06 25 5726

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-12-2013

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 6190708	B1	20-02-2001	AT	496540 T	15-02-2011
			AU	765946 B2	02-10-2003
			AU	1070500 A	08-05-2000
			CA	2347746 A1	27-04-2000
			CN	1323167 A	21-11-2001
			DK	1123012 T3	21-03-2011
			EP	1123012 A2	16-08-2001
			JP	4473451 B2	02-06-2010
			JP	2002527089 A	27-08-2002
			NZ	511439 A	31-10-2003
			PT	1123012 E	17-02-2011
			US	6190708 B1	20-02-2001
			WO	0022938 A2	27-04-2000

US 5585131	A	17-12-1996	AU	663957 B2	26-10-1995
			AU	4134993 A	23-12-1993
			BR	9302393 A	11-01-1994
			CA	2098552 A1	20-12-1993
			EP	0577294 A2	05-01-1994
			JP	H0698704 A	12-04-1994
			NO	932262 A	20-12-1993
			NZ	247925 A	28-03-1995
			US	5380542 A	10-01-1995
			US	5585131 A	17-12-1996

US 2004033291	A1	19-02-2004	AT	338463 T	15-09-2006
			AU	2002358151 A1	12-12-2003
			CH	695922 A5	31-10-2006
			DK	1366668 T3	08-01-2007
			EP	1366668 A1	03-12-2003
			EP	1507457 A1	23-02-2005
			ES	2269594 T3	01-04-2007
			US	2004033291 A1	19-02-2004
			WO	03099017 A1	04-12-2003

US 6268008	B1	31-07-2001	CA	2296307 A1	28-01-1999
			US	6268008 B1	31-07-2001
			WO	9903361 A1	28-01-1999

WO 0065930	A1	09-11-2000	AT	300188 T	15-08-2005
			AU	4300400 A	17-11-2000
			DE	60021551 D1	01-09-2005
			DE	60021551 T2	08-06-2006
			DK	1175156 T3	31-10-2005
			EP	1175156 A1	30-01-2002
			WO	0065930 A1	09-11-2000

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